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| Notice of References Cited | Application/Control No. 09/077,835 | Applicant(s)/Patent Under Reexamination CHANCE, BRITTON | |
| | Examiner Shawna J. Shaw | Art Unit 3737 | Page 1 of 1 |

U.S. PATENT DOCUMENTS

| * | | Document Number Country Code-Number-Kind Code | Date MM-YYYY | Name | Classification |
|---|---|--------------------------------------------------|-----------------|-------|----------------|
| * | A | US-6,496,718 B1 | 12-2002 | Lonky | 600/476 |
| | B | US- | | | |
| | C | US- | | | |
| | D | US- | | | |
| | E | US- | | | |
| | F | US- | | | |
| | G | US- | | | |
| | H | US- | | | |
| | I | US- | | | |
| | J | US- | | | |
| | K | US- | | | |
| | L | US- | | | |
| | M | US- | | | |

FOREIGN PATENT DOCUMENTS

| * | | Document Number Country Code-Number-Kind Code | Date MM-YYYY | Country | Name | Classification |
|---|---|--------------------------------------------------|-----------------|---------|------|----------------|
| | N | | | | | |
| | O | | | | | |
| | P | | | | | |
| | Q | | | | | |
| | R | | | | | |
| | S | | | | | |
| | T | | | | | |

NON-PATENT DOCUMENTS

| * | | Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages) |
|---|---|-------------------------------------------------------------------------------------------|
| | U | |
| | V | |
| | W | |
| | X | |

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
 Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

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|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-----------------------------------------------------------------------------------------------------------------------------------------|-------------|----------------------------------|-----------------------------|--------------------------|----------|-------------------------------|
| SUBSTITUTE FORM PTO-1449 (MODIFIED) | | U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE | | ATTY. DOCKET NO. 04799/045001 | | SERIAL NO. 09/077,835 | | |
| INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary) (37 CFR 1.98(b)) | | | | APPLICANT Britton Chance | | | | |
| | | | | FILING DATE June 4, 1998 | | GROUP | | |
| U.S. PATENT DOCUMENTS | | | | | | | | |
| EXAMINER INITIAL | | PATENT NUMBER | | ISSUE DATE | PATENTEE | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
| | AA | 3 | 0 6 8 7 4 2 | 12/18/62 | Hicks, Jr. et al. | 88 | 14 | 06/15/59 |
| | AB | 3 | 2 2 9 6 8 5 | 01/18/66 | Ringkamp et al. | 128 | 2.05 | 08/30/65 |
| | AC | 3 | 4 1 2 7 2 9 | 11/26/68 | Smith, Jr. | 128 | 2.05 | 08/30/65 |
| | AD | 3 | 4 6 1 8 5 6 | 08/19/69 | Polanyi | 128 | 2 | 10/23/65 |
| | AE | 3 | 6 3 8 6 4 0 | 02/01/72 | Shaw | 128 | 2R | 11/01/67 |
| | AF | 3 | 9 9 8 5 5 0 | 12/21/76 | Konishi et al. | 356 | 39 | 10/10/75 |
| | AG | 4 | 0 8 6 9 1 5 | 05/02/78 | Kofsky et al. | 128 | 2L | 05/25/76 |
| | AH | 4 | 1 3 8 7 2 7 | 02/06/79 | Mantz | 364 | 525 | 10/31/77 |
| | AI | 4 | 1 6 2 4 0 5 | 07/24/79 | Chance et al. | 250 | 461 | 05/23/78 |
| | AJ | 4 | 1 6 7 3 3 1 | 09/11/79 | Nielsen | 356 | 39 | 12/20/76 |
| | AK | 4 | 2 2 3 6 8 0 | 09/23/80 | Jöbsis | 128 | 633 | 03/05/79 |
| | AL | 4 | 2 8 1 6 4 5 | 08/04/81 | Jöbsis | 128 | 633 | 06/26/77 |
| | AM | 4 | 3 2 1 9 3 0 | 03/30/82 | Jöbsis et al. | 128 | 633 | 09/18/80 |
| | AN | 4 | 3 8 0 2 4 0 | 04/19/83 | Jöbsis et al. | 128 | 633 | 08/03/81 |
| FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION | | | | | | | | |
| | | DOCUMENT NUMBER | | PUBLICATION DATE | COUNTRY OR PATENT OFFICE | CLASS | SUBCLASS | TRANSLATION YES NO |
| | AO | WO 92/20273 | | 11/26/92 | PCT | | | |
| | AP | WO 96/20638 | | 07/11/96 | PCT | | | |
| OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication) | | | | | | | | |
| | AN | Chance et al., "Photon Migration in Muscle and Brain," Photon Migration in Tissues, Plenum Press, pp. 121-135, 1989, Chance, B., ed. | | | | | | |
| | AO | Cui et al., "Experimental Study of Migration Depth for the Photons Measured at Sample Surface," SPIE, 1431:180-191, 1991. | | | | | | |
| | AP | | | | | | | |
| | AQ | | | | | | | |
| EXAMINER | | | | | DATE CONSIDERED | | | |
| EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. | | | | | | | | |

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|-------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|----------------------------------|--------------------------|
| SUBSTITUTE FORM PTO-1449 (MODIFIED) INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary) (37 CFR 1.98(b)) | U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE | ATTY. DOCKET NO. 04799/045001 | SERIAL NO. 09/077,835 |
| | APPLICANT Britton Chance | | |
| | FILING DATE June 4, 1998 | GROUP | |

U.S. PATENT DOCUMENTS

| EXAMINER INITIAL | | PATENT NUMBER | | | | | | | ISSUE DATE | PATENTEE | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|---------------------|----|---------------|---|---|---|---|---|---|---------------|------------------|-------|----------|-------------------------------|
| | BA | 3 | 7 | 0 | 9 | 6 | 1 | 2 | 01/09/73 | Clemens | 356 | 178 | 03/10/71 |
| | BB | 3 | 8 | 6 | 6 | 5 | 9 | 9 | 02/13/75 | Johnson | 128 | 2 L | 01/21/72 |
| | BC | 3 | 9 | 9 | 4 | 5 | 8 | 5 | 11/30/76 | Frey | 356 | 40 | 08/11/75 |
| | BD | 4 | 1 | 1 | 9 | 4 | 0 | 6 | 10/10/78 | Clemens | 422 | 81 | 05/06/76 |
| | BE | 4 | 4 | 1 | 6 | 2 | 8 | 5 | 08/13/81 | Shaw et al. | 128 | 634 | 11/22/83 |
| | BF | 4 | 5 | 1 | 0 | 9 | 3 | 8 | 04/16/85 | Jöbsis et al. | 128 | 633 | 01/24/83 |
| | BG | 4 | 6 | 1 | 2 | 9 | 3 | 8 | 09/23/86 | Dietrich et al. | 128 | 665 | 09/06/83 |
| | BH | 4 | 8 | 0 | 0 | 8 | 8 | 5 | 1/31/89 | Johnson | 128 | 633 | 12/02/87 |
| | BI | 4 | 8 | 0 | 5 | 6 | 2 | 3 | 02/21/89 | Jöbsis | 128 | 633 | 09/04/87 |
| | BJ | 4 | 8 | 2 | 4 | 2 | 4 | 2 | 4/25/89 | Frick et al. | 356 | 41 | 09/26/86 |
| | BK | 4 | 8 | 4 | 6 | 1 | 8 | 3 | 4/11/89 | Martin | 128 | 633 | 12/02/87 |
| | BL | 4 | 9 | 0 | 8 | 7 | 6 | 2 | 3/13/90 | Suzuki et al. | 364 | 413.09 | 05/02/88 |
| | BM | 4 | 9 | 7 | 2 | 3 | 3 | 1 | 11/20/90 | Chance | 364 | 550 | 02/06/89 |
| | BN | 5 | 0 | 9 | 0 | 4 | 1 | 5 | 02/25/92 | Yamashita et al. | 128 | 665 | 01/11/91 |
| | BO | 5 | 1 | 0 | 6 | 3 | 8 | 7 | 4/21/92 | Kittrell et al. | 606 | 15 | 09/21/89 |
| | BP | 5 | 1 | 1 | 9 | 8 | 1 | 5 | 6/9/92 | Chance | 128 | 633 | 12/21/88 |
| | BQ | 5 | 1 | 8 | 7 | 6 | 7 | 2 | 2/16/93 | Chance et al. | 364 | 550 | 01/22/91 |
| | BR | 5 | 1 | 9 | 0 | 0 | 3 | 9 | 03/02/93 | Takeuchi et al. | 128 | 633 | 12/05/90 |
| | BS | 5 | 3 | 0 | 0 | 0 | 9 | 7 | 04/05/94 | Lerner et al. | 607 | 93 | 09/18/92 |
| | BT | 5 | 3 | 5 | 8 | 5 | 0 | 3 | 10/25/94 | Bertwell et al. | 606 | 27 | 01/25/94 |
| | BU | 5 | 5 | 5 | 1 | 4 | 2 | 2 | 09/30/96 | Simonsen et al. | 128 | 633 | 07/06/94 |

OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication)

| | | |
|--|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | BO | Greenfeld, "A Tissue Model For Investigating Photon Migration in Trans-Cranial Infrared Imaging," <i>Photon Migration in Tissues</i> , Plenum Press, B. Chance, ed., pp. 147-168, 1989. |
| | BP | Sevick et al., "Analysis of absorption, scattering, and hemoglobin saturation using phase modulation spectroscopy," <i>SPIE</i> , 1431:264-275, 1991. |
| | BQ | Sevick et al., "Photon migration in a model of the head measured using time -and frequency- domain techniques: potentials of spectroscopy and imaging," <i>SPIE</i> , 1431:84-96, 1991. |
| | BR | Weng et al., "Measurement of Biological Tissue Metabolism Using Phase Modulation Spectroscopy Technology," <i>SPIE</i> , 1431:161-171, 1991. |

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| EXAMINER | DATE CONSIDERED |
| EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. | |

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|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|------------------------------------------------------------|---|----------------------------------|------------------|--------------------------|-------|--------------------------|-------------------------------|-----------------|-------|----------|-------------|----|
| SUBSTITUTE FORM PTO-1449 (MODIFIED) | | U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE | | ATTY. DOCKET NO. 04799/045001 | | SERIAL NO. 09/077,835 | | | | | | | | |
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| | | | | FILING DATE June 4, 1998 | | GROUP | | | | | | | | |
| U.S. PATENT DOCUMENTS | | | | | | | | | | | | | | |
| EXAMINER INITIAL | | PATENT NUMBER | | | ISSUE DATE | PATENTEE | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE | | | | | |
| | CA | 5 | 0 | 8 | 8 | 4 | 9 | 3 | 02/18/92 | Giannini et al. | | | | |
| | CB | 5 | 4 | 0 | 8 | 0 | 9 | 3 | 04/18/95 | Ito et al. | | | | |
| | CC | 5 | 5 | 9 | 6 | 9 | 8 | 7 | 01/28/97 | Chance | | | | |
| | CD | 5 | 6 | 2 | 5 | 4 | 5 | 8 | 04/29/97 | Alfano et al. | | | | |
| | CE | 5 | 6 | 5 | 5 | 5 | 3 | 0 | 08/12/97 | Messerschmidt | | | | |
| | CF | 5 | 7 | 0 | 6 | 8 | 2 | 1 | 01/13/98 | Matcher et al. | | | | |
| | CG | | | | | | | | | | | | | |
| | CH | | | | | | | | | | | | | |
| | CI | | | | | | | | | | | | | |
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| | CM | | | | | | | | | | | | | |
| FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION | | | | | | | | | | | | | | |
| | | DOCUMENT NUMBER | | | PUBLICATION DATE | | | COUNTRY OR PATENT OFFICE | | | CLASS | SUBCLASS | TRANSLATION | |
| | | | | | | | | | | | | | YES | NO |
| | CN | WO 94/16615 | | | 04.08.94 | | | PCT | | | | | | |
| | CO | 0 290 279 | | | 09.11.88 | | | Europe | | | | | | |
| | CP | 0 233 108 A1 | | | 19.08.87 | | | Europe | | | | | | |
| | CQ | 0 467 459 A2 | | | 22.01.92 | | | Europe | | | | | | |
| OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication) | | | | | | | | | | | | | | |
| | CR | | | | | | | | | | | | | |
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| EXAMINER | | | | | | | | | | DATE CONSIDERED | | | | |
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Substitute Disclosure Form (PTO-1449)

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| SUBSTITUTE FORM PTO-1449 (MODIFIED) | | U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE | | ATTY. DOCKET NO. 04799/045001 | | SERIAL NO. 09/077,835 | | | | | | | |
| INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary) (37 CFR 1.98(b)) | | | | APPLICANT Britton Chance | | | | | | | | | |
| | | | | FILING DATE June 4, 1998 | | GROUP 3733 | | | | | | | |
| U.S. PATENT DOCUMENTS | | | | | | | | | | | | | |
| EXAMINER INITIAL | | PATENT NUMBER | | | ISSUE DATE | PATENTEE | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE | | | | |
| | AA | 5 | 4 | 2 | 0 | 6 | 0 | 7 | 05/30/95 | Miller et al. | | | |
| | AB | | | | | | | | | | | | |
| | AC | | | | | | | | | | | | |
| | AD | | | | | | | | | | | | |
| | AE | | | | | | | | | | | | |
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| FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION | | | | | | | | | | | | | |
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| | AL | 0 280 986 A1 | | | 07.09.88 | Europe | | | | | | | |
| | AM | DD 227 044 A1 | | | 11.09.85 | Germany | | | | | | | |
| | AN | DE 44 10 888 A1 | | | 05.10.95 | Germany | | | | | | | |
| | AO | | | | | | | | | | | | |
| | AP | | | | | | | | | | | | |
| OTHER DOCUMENTS (Including Author, Title, Date, Place of Publication) | | | | | | | | | | | | | |
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